DOCUMENT RESUME

ED 385 361 PS 023 417

AUTHOR Guerrero, Janis K.
TITLE Serving the Advanced Middle School Learner in the Heterogeneous Classroom.
PUB DATE 18 Apr 95
NOTE 11p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 18-22, 1995).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academically Gifted; Curriculum Design; *Heterogeneous Grouping; Instructional Development; Instructional Materials; Intermediate Grades; Junior High Schools; *Middle Schools; *Special Education; *Special Education Teachers; Talent; Teacher Attitudes; Teaching Methods; Thematic Approach
IDENTIFIERS Education Consolidation Improvement Act Chapter 2

ABSTRACT

The Chapter 2-Carnegie Middle School Project was designed to develop educational programming and to provide appropriate services to advanced and gifted learners within the restricted middle school environment. This study examined the extent to which trained teachers could effectively implement advanced instructional techniques and curricula for gifted students in a heterogeneous middle school environment. Data were collected through field notes and unstructured interviews covering seven categories: (1) teacher assessment; (1) teacher self-perception of professional growth; (3) academic challenge; (4) curricular decisions; (5) instruction; (6) classroom environment; and (7) classroom management. Findings show that the teachers most successful in implementing thematic and interdisciplinary curricula were those who expressed enthusiasm for their discipline and excitement in learning new teaching skills. There was little evidence of instructional differentiation in depth, complexity, novelty, or acceleration for advanced and gifted learners. Teachers tended to underestimate their students' readiness for more sophisticated instructional experiences. Nonetheless, the results indicated that students showed understanding of their curricular themes and generalizations, and expressed enthusiasm for their classes. Contains 11 references. (AP)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



ED 385 361

# Serving the Advanced Middle School Learner in the Heterogeneous Classroom

Janis K. Guerrero

Division of Gifted/Talented Education

Texas Education Agency

Paper Presented at the Annual Meeting of the American Educational Research Association in San Francisco, California on April 18, 1995.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Janis K. Guerrero
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Running Head: SERVING THE ADVANCED MIDDLE SCHOOL LEARNER

PS 023412



BEST COPY AVAILABLE

Abstract

This paper describes the Chapter 2-Carnegie Middle School Project, a three-year project designed to develop educational programming that will enable educators to provide appropriate services to advanced and gifted learners within the restructured middle school environment. In year one, twelve academic team members representing grades six thorough nine from four pilot schools that reflect the regional and demographic diversity of Texas received intensive professional development in three domains essential to serving the advanced learner in the restructured middle school: development of thematic, interdisciplinary curriculum; advanced instructional strategies; and student assessment for instructional services. In year two, the academic team members implemented their thematic, interdisciplinary curriculum and served as resource persons to other faculty at their respective campuses.

The researcher and two consultants conducted classroom teaching observations in January 1994, October 1994, and February 1995. During those visits, the researcher and consultants collected data on seven variables: teacher involvement, teacher self-perception of professional growth, academic challenge, curricular decisions, instruction, classroom environment, and classroom management. Qualitative analysis of data from the October 1994 campus visits occurred in two stages, following analytic procedures summarized by Marshall and Rossman (1995).

Findings showed that teachers who were most successful in implementing thematic, interdisciplinary curriculum through advanced instructional models were those who expressed enthusiasm for their discipline and/or excitement in learning new teaching skills. There was little evidence of instructional differentiation in depth, complexity, novelty, or acceleration for advanced and gifted learners. Students showed understanding of their curricular themes and generalizations, and teachers demonstrated proficiency in student-centered instructional models.

# Serving the Advanced Middle School Learner in the Heterogeneous Classroom

## Introduction and Background

Middle school educators face a challenge to implement educational programs that serve the gifted learner and honor the middle school philosophy. Carnegie's *Turning Points* document recommends restructuring middle schools to focus on the characteristics of adolescents and to provide supportive environments that assure the success of every student. The National Middle School Association endorses middle school curriculum that is based on the needs and characteristics of young adolescents, and it proposes that instruction be provided in a variety of organizational arrangements (NMSA, 1982). Ability grouping, in particular, is targeted as a detrimental practice that is incompatible with the middle school philosophy. Instead, middle school reformers suggest strategies for achieving a supportive academic environment that includes heterogeneous grouping, academic teaming, flexible scheduling, and expansion of opportunities for learning.

Gifted educators advocate instruction that challenges students to perform at individual levels of excellence. Tomlinson (1994) suggests that gifted learners work with complex and abstract content, high level thinking strategies, and preparation of professional quality products. Van Tassel-Baska, et al. (1988) propose curriculum and instruction for the gifted that integrate three dimensions: content mastery that permits students to progress through the curriculum at their own pace; encouragement of in-depth, independent learning through a process/ product/ research emphasis; and exploration of issues, themes, and concepts across curricular areas.

Erb (1992) contends that middle school and gifted education advocates share key points of convergence in their philosophies. Both camps adhere to the notions that learning is complex, that learners have diverse needs and interests, that learning is best facilitated by teacher teams, that learning is a problem-solving activity, that unique products and

performances are authentic outputs of learning, and that the learning environment is dynamic. He adds that middle school and gifted education proponents share concerns for the affective as well as intellectual development of learners. In fact, Erb suggests the reason a rift exists between middle school and gifted educators in spite of their conceptual agreements is that many middle schools do not actually deliver the kinds of curriculum and instruction that meet the needs of diverse learners. Unfortunately, in some heterogeneous classroom settings like those advocated by middle school reformers, gifted students are expected to be teachers in cooperative learning groups that work with curriculum at or below grade level. This type of situation has repeatedly been found detrimental to gifted students' affective and academic development (Ellett, 1993; Nelson, Gallagher, and Coleman, 1993; Tomlinson, 1994).

There is a clear need for innovative efforts to link gifted education and general education within the middle school model. In fact, Van Tassel-Baska (1994 ) suggests that curriculum reform efforts, which are a part of general education, emphasize practices that have been promoted by educators of the gifted for a long time. These include reorganizing curriculum content according to essential elements to facilitate continuous progress, using ongoing assessment to reduce repetition of learned materials, providing active learning opportunities through the emphasis of problem solving and critical thinking strategies, and incorporating interdisciplinarity in curriculum development. Similarly, Gallagher (1991) noted several goals shared by middle school reformers and educators of the gifted, and he suggested collaboration between the two groups could produce better educational programming for all students.

The Chapter 2-Carnegie Middle School Project is designed to provide the needed link between gifted education and the middle school model. This three-year project aims to train teachers in the development and implementation of advanced educational programming that is appropriately challenging for all students, including advanced and gifted learners within the restructured middle school environment.

Moneys from the Carnegie Middle Grade School State Policy Initiative charge the project to facilitate the implementation of the eight recommendations of the *Turning Points* document and to target efforts on schools serving educationally disadvantaged youth. More specifically, the intent of the Carnegie grant is to provide resources to promote reform in curriculum, instruction, and assessment. Federal Chapter 2 moneys direct the project to provide in-depth training on the development of thematic interdisciplinary curriculum and on instructional strategies that meet the needs of all middle school students, including advanced and gifted learners. Through its duality of sponsorship and direction, the Chapter 2-Carnegie Middle School project holds the potential to inform practice in an area of great need: the provision of appropriate instructional services for advanced and gifted learners within the restructured middle school.

## Purpose

The objective of this investigation was to determine the extent to which trained teachers in heterogeneously grouped middle school classrooms could effectively implement advanced instructional components such as the following: advanced instructional models, including the advance organizer and group investigation; teacher-designed thematic, interdisciplinary curriculum; ongoing assessment for appropriate instructional services; flexible grouping for instruction; critical thinking and problem solving; inductive and deductive reasoning; and sophisticated discussion techniques. In other words, can instructional techniques and curricula that have traditionally been reserved for gifted students be effectively implemented in a heterogeneous middle school environment by teachers who are trained in these techniques and curriculum development, and who have extensive on-going professional support?

## Method

### Sample

During year one of the project, twelve academic team members representing grades six through nine from each of four pilot schools were invited to participate in the Chapter 2-

Carnegie Middle School Project. Each of the four schools was selected because of its strong campus leadership, its demonstrated commitment to middle school reform, its collaborative relationship with the education service center contacts in gifted education and middle school education, its student diversity, and its regional location. Through purposive selection of the school sample, project planners sought to achieve representation of the state's student diversity and geographic regions. As a result, the project schools include campuses that are predominantly Latino, predominantly African American, rural, inner-city, low socio-economic, and middle-class.

In a state as large as Texas, regional representation is a significant variable in achieving generalizability of findings. Therefore, purposive selection ensured that the original four project campuses represented the north, east, west, and central regions of the state. At the end of the first year, a fifth campus, representing the southern region was added to the project.

Procedure

Professional development. During year one of the project, academic team members from the four original pilot schools received intensive professional development in three domains essential to serving the gifted learner in the restructured middle school: the development of thematic interdisciplinary curriculum, appropriate instructional and grouping strategies, and continuous assessment for instructional services.

Project participants received professional development from three sources. One source was the project consultant who provided instruction on the components of advanced learning experiences and the integration of those components into thematic interdisciplinary curriculum. The project consultant guided team members at the training sessions through hands-on experiences in developing curricula and instructional materials. At the close of each session, team members received a curricula-related assignment to complete and submit to the consultant for her evaluation and subsequent feedback to the team members prior to the next training session.

A second source of professional development was the regional education service center (ESC) contacts who assisted their respective campus' academic teams with developing curricula. The ESC contacts attended the training sessions along with their assigned academic teams and then followed up with supplemental training and support so that team members could successfully complete their assignments within the prescribed time frame. Because the academic team members vary in their professional experience and expertise, the support of the ESC contacts in providing on-going professional development after the intensive training sessions was a critical element in the progress of the project.

The third source of professional development was provided by the Middle School Mentor Network, a project sponsored by the Middle School Education Division. The Middle School Mentor Network offers top-quality opportunities for free professional development throughout the academic year and summer to its member schools. Included in the Network programs are the Middle School Academy and the Middle School Advanced Academy, which provide training in a broad array of topics supportive of campuses that wish to implement advanced learning opportunities schoolwide.

Implementation. In year two, the academic team members implemented their thematic, interdisciplinary curriculum and served as resource persons to other faculty at their respective campuses.

Data Collection and Analysis. The researcher and two consultants conducted classroom teaching observations in January 1994, October 1994, and February 1995. During those visits, the researcher and consultants collected data in seven categories to assess the implementation process: teacher involvement, teacher self-perception of professional growth, academic challenge, curricular decisions, instruction, classroom environment, and classroom management. Data collection included field notes taken during classroom observations; unstructured interviews with education service center consultants, campus leaders, teachers, and students; the new thematic, interdisciplinary curricula, and a teacher self-assessment instrument. At the conclusion of each campus visit, the researcher

and consultants collaboratively reviewed the field notes, teacher self-perception instruments, and curricula to cross check perceptions for their truthfulness (Lincoln and Guba, 1985). Qualitative analysis of data from the October 1994 campus visits occurred in two stages, following analytic procedures summarized by Marshall and Rossman (1995).

## Results

Although the project has only recently completed its second year, much has already been learned about the challenges of training faculty who can successfully implement advanced educational programming for all students, including advanced and gifted learners in the restructured middle school. Findings showed that teachers who were most successful in implementing thematic, interdisciplinary curriculum through advanced instructional models were those who expressed enthusiasm for their discipline and/or excitement in learning new teaching skills. Most of the teachers demonstrated proficiency in their newly-acquired, student-centered instructional models.

There was little evidence in the teachers' instruction of differentiation in depth, complexity, novelty, or acceleration for advanced and gifted learners. In fact, teachers generally underestimated their students' readiness for more sophisticated instructional experiences. They described their students as less motivated and more teacher-dependent than the observations of the students indicated. Nonetheless, students showed understanding of their curricular themes and generalizations, and they expressed enthusiasm for their classes.

Classroom management was excellent. Most classrooms evidenced intrinsic, rather than extrinsic behavior management. Teachers noted that student behavior and interest had improved, and they attributed this improvement to the new curriculum and instructional strategies.

There was clear evidence that the general level of instruction was improved in the project teachers' classrooms, even though differentiation of instruction for advanced learners was not obvious.

## Conclusions

Effecting real change in curriculum and instruction in the heterogeneous middle school classroom is a gradual process. Certainly, changes in curriculum content and organization are more readily accepted and implemented by teachers than are modifications in traditional, teacher-dominant and whole class instructional methods. Generally, teachers who were most successful in implementing thematic, interdisciplinary curriculum through advanced instructional models exhibited the following characteristics: enthusiasm for their discipline, excitement for learning new teaching skills, and conceptual understanding of the advanced instructional models. Additionally, teachers who evidenced the greatest proficiency in implementation of thematic, interdisciplinary curricula were those who had the benefit of a broad base of on-going support of their professional development. This broad base included support from school district consultants as well as the campus leader, and the education service center consultant. Without question, level of commitment to the project's curricular and instructional goals by the teacher, the campus leader, and the technical support consultant proved to facilitate or limit the level of implementation that was evidenced by individual teachers as well as by the campuses.

In spite of intensive training for teachers in instructional differentiation strategies for advanced learners (depth, complexity, novelty, and acceleration), there was little evidence of the adoption of these techniques. Furthermore, evidence of the teachers' underestimation of their students' readiness for more sophisticated learning experiences suggests that altering teachers' instructional practices must first involve raising teachers' expectations of their students.

## References

Ellet, P. (1993, December). Cooperative learning and gifted education. Roeper Review, 16(2), 114-116.

Erb, T.O. (1992, Fall). Encouraging gifted performance in middle schools. Midpoints: Occasional Papers, 3(1), 1-24.

Feldhusen, J. (1990, Winter). What is appropriate instruction for the gifted at the secondary level? Tempo. 6-10.

Gallagher, J.J. (1991, September). Merging education of the gifted and middle schools. Paper presented at the Conference on Middle Schools, Austin, TX.

Lincoln, Y.S. & Guba, E.G. (1985). Naturalistic inquiry. Sage: Newbury Park.

Marshall, C., & Rossman, G.B. (1995). Designing qualitative research, Second edition. Thousand Oaks, CA: Sage.

National Middle School Association. (1982). This we believe. A position paper of the National Middle School Association.

Nelson, S.M.; Gallagher, J.J.; Coleman, M.R. (1993, December). Cooperative learning from two different perspectives. Roeper Review. 16(2), 117-121.

Tomlinson, C.A. (1994, February). Gifted learners: The boomerang kids of middle school? Roeper Review. 16(3), 177-181.

Van Tassel-Baska, J.; Feldhusen, J.; Seeley, K.; Wheatley, G.; Silverman, L.; & Foster, W. (1988). Comprehensive curriculum for gifted learners. Boston: Allyn and Bacon.

Van Tassel-Baska, J. (1994). Gifted education at a crossroads and must make partnerships. NCAGT Newsletter, 18(3), 1-18.